

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference ATY	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/KR2003/000675	International filing date (day/month/year) 04 APRIL 2003 (04.04.2003)	Priority date (day/month/year) 09 APRIL 2002 (09.04.2002)
International Patent Classification (IPC) or national classification and IPC IPC7 D02G 1/18		
Applicant KOLON INDUSTRIES, INC et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 05 NOVEMBER 2003 (05.11.2003)	Date of completion of this report 29 JULY 2004 (29.07.2004)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer LEE, Min Hyung Telephone No. 82-42-481-5991

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/000675

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under Article 19
 pages _____, filed with the demand
- ☐ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under Article 19
 pages _____, filed with the demand
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1 - 28</u>	<u>YES</u>
	Claims		<u>NO</u>
Inventive step (IS)	Claims	<u>1 - 28</u>	<u>YES</u>
	Claims		<u>NO</u>
Industrial applicability (IA)	Claims	<u>1 - 28</u>	<u>YES</u>
	Claims		<u>NO</u>

2. Citations and explanations (Rule 70.7)

1. Reference is made to the following documents:

D1: EP 0 352 376 A (TORAY INDUSTRIES, INC)

2. Reasoned statement with regard to novelty, inventive step and industrial applicability:

Claims 1-28 relate to a textured yarn composed of a fiber forming component and an extraction component with different shrinkage and excellent suede effect, wherein two-component composite yarn(effect yarn) having a monofilament fineness of 0.001 to 0.3 denier after extracting an extraction component are twined around a thermoplastic multifilament yarn(core yarn), 2 to 350 loops per meter of said two-component composite yarn of at least 1.0mm in length, and more than 95% of the two-component composite yarn loops of at least 1.0mm in length has a length of 1.0 to 2.5mm, and also relate to a method for manufacturing said textured yarn by air-texturing said two component composite yarn(effect yarn) and said thermoplastic multifilament yarn(core yarn) in an air texturing nozzle under the condition that the overfeed ratio of effect yarn to core yarn is 1.2 to 4.0.

The closest prior art to the present invention, D1 relates to a latent looped yarn, a fabric made of the same, and a method for manufacturing the latent looped yarn, disclosing the basic structure with mixed multifilament comprising two-component synthetic multifilaments having fine loops on the surface and different thermal shrinkage between said two components.

(Continued on Supplemental Sheet.)

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

Box V.

However, D1 does not disclose the technical feature of the present invention relating to a textured yarn with different shrinkage wherein two-component composite yarn(effect yarn) composed of a fiber forming component and an extraction component having a monofilament fineness of 0.001 to 0.3 denier after extracting an extraction component are twined around a thermoplastic multifilament yarn(core yarn), 2 to 350 loops per meter of said two-component composite yarn of at least 1.0mm in length, and more than 95% of the two-component composite yarn loops of at least 1.0mm in length has a length of 1.0 to 2.5mm and also relating to a method for manufacturing said textured yarn by air-texturing said two component composite yarn(effect yarn) and said thermoplastic multifilament yarn(core yarn) in an air texturing nozzle under the condition that the overfeed ratio of effect yarn to core yarn is 1.2 to 4.0. In addition, said technical feature and method of manufacturing are not disclosed and obvious to a person skilled in the art.

Therefore, claims 1 to 28 meet the requirements of PCT Article 33(2) and (3), with respect to novelty and an inventive step.

Claims 1 to 28 also meet the criteria set out in PCT Article 33(4), because all the claims are considered to be industrial applicability.